

Application No.: 09/991,151

2

Docket No.: 532782000100

**AMENDMENTS TO THE CLAIMS**

Please amend the claims as follows:

This listing of claims will replace all prior versions, and listing, of claims in the application:

1. (previously presented): A method for solvent extraction of an organic analyte from a sample comprising the analyte, said method comprising,  
contacting the sample in an extraction cell with a preheated pressure-regulated organic solvent system comprising an extraction fluid comprising at least one organic solvent, wherein the extraction fluid in the extraction cell is under conditions comprising elevated temperature and regulated pressure within a specified pressure range or at a specified pressure value to non-selectively extract said analytes from said sample, and the solvent in the extraction cell is maintained under the regulated pressure or pressure range by an in-line back pressure regulator positioned downstream of the extraction cell, and said organic solvent system is in liquid form under conditions comprising elevated temperature and pressure during extraction.
2. (previously presented): The method of claim 1 wherein said solvent system comprises more than one organic solvent.
3. (previously presented): The method of claim 1 wherein said solvent comprises two organic solvents.
4. (original): The method of claim 1 wherein said regulated pressure is from about 10 to about 30 bar.
5. (original): The method of claim 1 wherein said temperature is from about 100 to about 200 degrees Celsius.
6. (previously presented): The method of claim 1 wherein the regulated pressure is below about 30 bar.

sd-264461

Application No.: 09/991,151

3

Docket No.: 532782000100

7. (original): The method of claim 1 wherein said sample fills said extraction cell.
8. (original): The method of claim 1 wherein said extraction cell is full of a mixture comprising the sample and an inert filler.
9. (original): The method of claim 1 wherein the contact with solvent occurs for between about 5 and about 200 minutes.
10. (original): The method of claim 1 wherein the contact with solvent occurs for about 20 to about 25 minutes.
11. (original): The method of claim 1 wherein, after about 20 or 25 minutes of contact with solvent no more than about 10% more of said analytes can be extracted in said method for an additional 20 minutes.
12. (previously presented): The method of claim 1 wherein the solvent comprises methanol.
13. (previously presented): The method of claim 1 wherein the sample is selected from the group consisting of a botanical and an herbal preparation.
14. (original): The method of claim 1 wherein said solvent comprises one or more organic solvents selected from the group consisting of perchloroethylene, isooctane, hexane, acetone, methylene chloride, toluene, methanol, chloroform, ethanol, tetrahydrofuran, acetonitrile, methyl ethyl ketone, pentane, N-methylpyrrolidone, cyclohexane, dimethyl formamide, xylene, ethyl acetate, chlorobenzene, methoxyethanol, morpholine, pyridine, piperidine, dimethylsulfoxide, ethoxyethanol, isopropanol, propylene carbonate, petroleum ether, diethyl ether, dioxane, and mixtures thereof.

sd-264461

Application No.: 09/991,151

4

Docket No.: 532782000100

15. (previously presented): The method of claim 1 wherein said organic solvent system further comprises an additive.

16. (previously presented): The method of claim 15 wherein said additive is selected from the group consisting of trifluoroacetic acid, citric acid, acetic acid, trimethyl amine, and trimethyl ammonium hydroxide.

17. (previously presented): The method of claim 1 wherein said analytes comprise at least one analyte selected from the group consisting of aristolochic acids, berberine, and strychnine.

18. (previously presented): The method of claim 1 wherein no microwave energy is used, or, microwave energy is used to heat the sample, the solvent or the extraction cell.

19. (previously presented): The method of claim 1 further comprising detection of said extracted analytes.

20. (previously presented): The method of claim 1 wherein the contacting is at a flow rate of about 1 ml/min solvent.

21. (previously presented): The method of claim 1 further comprising analysis of said extracted analytes by a technique selected from the group consisting of gas chromatography, mass spectrometry, ion chromatography, liquid chromatography and capillary electrophoresis.

22. (withdrawn): An apparatus adapted to carry out the method of claim 1, said apparatus comprising  
an extraction cell capable of containing said sample and containing a solvent line input connector and a solvent line output connector for solvent lines,

sd-264461

Application No.: 09/991,151

5

Docket No.: 532782000100

a heating assembly capable of heating said extraction cell and the solvent line in contact with said input connector,

a pump linked to said extraction cell via said input connector and capable of delivering solvent to said cell, and

a backpressure regulator linked to said cell via said output connector and capable of regulating pressure to be 10-20 bar in said cell.

23. (withdrawn): The apparatus of claim 22 wherein said heating assembly comprises a preheating coil in contact with said solvent line in contact with said input connector.

24. (withdrawn): The apparatus of claim 22 further comprising a collection means for extracted analytes.

25. (withdrawn): The apparatus of claim 22 wherein said solvent comprises one or more than one solvent.

26. (withdrawn): The apparatus of claim 22 wherein said solvent comprises at least two organic solvents.

27. (withdrawn): The apparatus of claim 22 wherein said backpressure regulator limits pressure in said extraction cell to be 20 bar.

28. (withdrawn): The apparatus of claim 22 wherein said extraction cell is maintained at a temperature from about 100 to about 200 degrees Celsius.

29. (withdrawn): The apparatus of claim 22 wherein the solvent is methanol.

30. (withdrawn): The apparatus of claim 22 wherein the sample is selected from a botanical or herbal preparation.

sd-264461

Application No.: 09/991,151

6

Docket No.: 532782000100

31. (withdrawn): The apparatus of claim 22 wherein said solvent comprises one or more organic solvents selected from the group consisting of perchloroethylene, isooctane, hexane, acetone, methylene chloride, toluene, methanol, chloroform, ethanol, tetrahydrofuran, acetonitrile, methyl ethyl ketone, pentane, N-methylpyrrolidone, cyclohexane, dimethyl formamide, xylene, ethyl acetate, chlorobenzene, methoxyethanol, morpholine, pyridine, piperidine, dimethylsulfoxide, ethoxyethanol, isopropanol, propylene carbonate, petroleum ether, diethyl ether, dioxane, and mixtures thereof.

32. (withdrawn): The apparatus of claim 22 wherein said solvent contains an additive.

33. (withdrawn): The apparatus of claim 32 wherein said additive is selected from trifluoroacetic acid, citric acid, acetic acid, trimethyl amine, and trimethyl ammonium hydroxide.

34. (withdrawn): The apparatus of claim 22 wherein said analytes include at least one analyte selected from aristolochic acids, berberine, and strychnine.

35. (withdrawn): The apparatus of claim 22 wherein said pump delivers solvent at a flow rate of about 1 ml/min solvent.

36. (previously presented): The method of claim 1, wherein the extraction cell further comprises a solvent line input connector and a solvent line output connector for solvent lines.

37. (previously presented): The method of claim 36, wherein the extraction cell further comprises an apparatus comprising a heating assembly capable of heating the extraction cell.

38. (previously presented): The method of claim 36, wherein the solvent line is in contact with the input connector, and the extraction cell further comprises an apparatus comprising a

sd-264461

Application No.: 09/991,151

7

Docket No.: 532782000100

pump linked to the extraction cell via the input connector, and the input connector is capable of delivering solvent to the extraction cell.

39. (previously presented): The method of claim 36, wherein the down-stream positioned in-line backpressure regulator is linked to the extraction cell via the solvent output connector.

40. (previously presented): The method of claim 39, wherein the backpressure regulator is capable of regulating pressure to be in a range of between about 10 bar to 20 bar in the extraction cell.

41. (previously presented): The method of claim 37, wherein the heating assembly further comprises a preheating coil in contact with a solvent line in contact with the input connector.

42. (previously presented): The method of claim 1, further comprising an apparatus for collecting the extracted analytes.

43. (previously presented): The method of claim 1, wherein the extraction cell is maintained at a temperature between about 100 degrees Celsius ( $^{\circ}\text{C}$ ) to about 200  $^{\circ}\text{C}$ .

44. (previously presented): The method of claim 1, wherein the sample comprises a solid or a semi-solid sample.

45. (previously presented): The method of claim 1, wherein the solvent is subject to a heating step prior to contact with the extraction cell.

46. (previously presented): The method of claim 1, wherein the extracted analyte is continuously extracted and removed by a continuing flow of heated and pressure-regulated solvent moving through the extraction cell.

sd-264461

Application No.: 09/991,151

8

Docket No.: 532782000100

47. (previously presented): The method of claim 1, wherein the extracted analyte is moved through the extraction cell to a collection apparatus, a detection apparatus or an analytical device.

48. (previously presented): The method of claim 47, wherein the analytical device comprises a capillary electrophoresis (CE) or a high performance liquid chromatography (HPLC).

sd-264461